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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,631	12/18/2000	Christopher Patrick	QCPA990347	5613
23696	7590	07/13/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			LIU, SHUWANG	
			ART UNIT	PAPER NUMBER
			2634	8

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/741,631	PATRICK, CHRISTOPHER	
	Examiner	Art Unit	
	Shuwang Liu	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 April 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-8,10-15,17-21,23 and 24 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3-8,10-15,17-21,23 and 24 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 8, 15, 21 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-8, 10-15, 17-21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison et al. (US 5,752,218).

As shown in figures 1-6, Harrison et al. discloses:

(1) regarding claims 1 and 8:

a method comprising:

determining a code phase of each among a plurality of received signals, wherein said received signals are GPS (column 6, line 47-column 8, line 58);

and

transmitting a time difference between the code phases of at least one pair among the plurality of received signals (column 8, line 65-column 10, line 34).

(2) regarding claims 15, 21 and 23:

An apparatus comprising:

a receiver (figure 1) configured to receive a plurality of signals;

a correlator (for example, 8 in figure 1) configured to determine a code phase for each among the plurality of received signals (column 6, lines 3-58, and column 6, line 47-column 8, line 58); and

a transmitter (4) configured to transmit a time difference between the code phases of at least one pair among the plurality of received signals (figure 1, column 4, lines 20-41, and column 8, line 65-column 10, line 34).

(3) regarding claims 3, 10 and 17:

wherein each among the plurality of received signals has a corresponding periodic code (Gold code, column 6, line 51-67), and

wherein each among the code phases relates to a predetermined position within the corresponding periodic code (column 6, line 51-58).

(4) regarding claims 4, 5, 11, 12, 18 and 19:

wherein each among the plurality of received signals is based at least in part on a corresponding direct-sequence spread spectrum modulated signal (column 6, lines 3-13).

(5) regarding claims 6 and 13:

the method further comprising receiving a composite signal, wherein each among the plurality of received signals is based at least in part on at least a portion of the composite signal (column 6, lines 13-41).

(6) regarding claims 7, 14 and 20:

wherein the determining a code phase of each among a plurality of received signals comprises calculating a correlation, for each among the plurality of received signals, between a corresponding code sequence and a signal based at least in part on the composite signal (column 6, lines 3-58, and column 6, line 47-column 8, line 58),

wherein each among the plurality of received signals has a corresponding periodic code (Gold code, column 6, line 51-67), and

wherein each among the code phases relates to a corresponding predetermined position within the corresponding periodic code, and wherein the code sequence relates at least in part to the corresponding periodic code (Gold code, column 6, line 51-67).

(7) regarding claim 24:

a reference receiver (16) configured to receive signals from a plurality of space vehicles (12) and transmit information; and

a field receiver (14) configures to receive signals from a plurality of space vehicles (12) and to receive the information,

wherein the reference receiver determines a reference code phase for each among at least a first and a second one of the signals, and

wherein the information pertains at least to a time difference between the reference code phase for the first and the second one of the signals (column 9, lines 10-column 10, line 67), and

wherein the field receiver determines a field code phase for the first one of the signals, and

wherein the filed receiver determines a field code phase for the second one of the signals at least in part from the information (column 8, line 65-column 10, line 34).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Shuwang Liu
Primary Examiner
Art Unit 2634

July 7, 2004